

Docket No.: M4065.0509/P509C  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

---

In re Patent Application of:  
Hasan Nejad et al.

Application No.: Not Yet Assigned

Confirmation No.:

Filed: Concurrently Herewith

Art Unit: 2818

For: **STACKED COLUMNAR IT-*n*MJT  
MRAM STRUCTURE AND ITS  
METHOD OF FORMATION AND  
OPERATION**

---

Examiner: Not Yet Assigned

**INFORMATION DISCLOSURE STATEMENT (IDS)**

MS Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement accompanies the new patent application submitted herewith.

A copy of each reference on the PTO/SB/08 is attached.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other

material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1073, under Order No. M4065.0509/P509 C. A duplicate copy of this paper is enclosed.

Dated: February 24, 2004

Respectfully submitted,

By 

Thomas J. D'Amico

Registration No.: 28,371

Michael A. Weinstein

Registration No.: 53,754

DICKSTEIN SHAPIRO MORIN &  
OSHINSKY LLP

2101 L Street NW

Washington, DC 20037-1526

(202) 785-9700

Attorneys for Applicant

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Hasan Nejad
				Art Unit	2818
				Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	M4065.0509/P509 BC

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA	US-2000/0012228	8/2001	Perner	
	AB	US-2001/0038548	11/2001	Perner et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	How Magnetic RAM Will Work < <a href="http://www.howstuffworks.com/mram2.htm">http://www.howstuffworks.com/mram2.htm</a> >	
	CB	MTJ Based MRAM System Design < <a href="http://www.aps.org/meet/MAR01/baps/abs/S2550004.html">http://www.aps.org/meet/MAR01/baps/abs/S2550004.html</a> >	
	CC	Motorola Demonstrates Revolutionary Memory Technology < <a href="http://www.apspg.com/press/060100/mram-final.html">http://www.apspg.com/press/060100/mram-final.html</a> >	
	CD	Computing Unplugged < <a href="http://www.research.ibm.com/thinkresearch/pages/2001/20010202_mram.shtml">http://www.research.ibm.com/thinkresearch/pages/2001/20010202_mram.shtml</a> >	
	CE	Magnetic Tunnel Junction Materials for Electronic Applications < <a href="http://www.tms.org/pubs/journals/JOM/0006/Slaughter/Slaughter-0006.html">http://www.tms.org/pubs/journals/JOM/0006/Slaughter/Slaughter-0006.html</a> >	
	CF	Magneto-Electronics: Magnetic Tunnel Junctions < <a href="http://www.almaden.ibm.com/st/projects/magneto/mtj/">http://www.almaden.ibm.com/st/projects/magneto/mtj/</a> >	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.